

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	64	("5204947"   "5377354"   "5499109"   "5508817"   "5513126"   "5548789"   "5572643"   "5574843"   "5619648"   "5623603"   "5627764"   "5630060"   "5666542"   "5675507"   "5680619"   "5694163"   "5706502"   "5710883"   "5724574"   "5734835"   "5737599"   "5737619"   "5754700"   "5754765"   "5754851"   "5760773"   "5761673"   "5764235"   "5767846"   "5768505"   "5781741"   "5781785"   "5784058"   "5787470"   "5794039"   "5794259"   "5809512"   "5818435"   "5818447"   "5821926"   "5826102"   "5828839"   "5835683"   "5842020"   "5845299"   "5848415"   "5850446"   "5854893"   "5870544"   "5875322"   "5878223"   "5882202"   "5911776"   "5918012"   "5956491"   "5963217"   "5983190"   "5987503"   "5995093"   "6014688"   "6029164"   "6069622"   "6161107"   "6210172").PN. OR ("6684211").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 15:33
L3	64	L2 and @ad<"19980401"	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 16:42
L4	2	L3 and (emoticon\$1 or smil\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:28
L5	46	L3 and (messag\$3 or chat\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 16:27
L6	2	("5963217").PN.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/07/20 16:33
L7	2	("5812126").PN.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/07/20 16:33
L8	25	("4805222"   "4903218"   "5257306"   "5488686"   "5491743"   "5659691"   "5732232"   "5736982").PN. OR ("5812126").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 16:41

7/20/06

## EAST Search History

L9	10	L8 and @ad<"19980401"	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:27
L10	138	(715/534).CCLS.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/07/20 17:27
L11	60	L10 and @ad<"19980401"	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:38
L12	0	L11 and (emoticon\$1 or smil\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:28
L13	5703109	replac\$3 NEAR3 (text or word or term) NEAR\$3 (image\$1 or emoticon\$1 or (multimedia NEAR\$1 object\$1))	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:31
L14	70468	L13 and pars\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:32
L15	17307	L14 and substitut\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:35
L16	202	L15 and smil\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:33
L17	35	L16 and mnemonic	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:34
L18	32213	L13 and (messenger or messaging)	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:39
L19	5489	L18 and substitut\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:38
L20	33	L19 and emoticon	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:38
L21	3720	L18 and @ad<"19980401"	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:39
L22	668	L21 and substitut\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:44
L23	0	L22 and emoticon\$1	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:38

## EAST Search History

L24	668	L22 and @ad<"19980401"	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:49
L25	668	L22 and (messenger or messaging)	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:39
L26	6	L21 and (instant ADJ messag\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:45
L27	49	("5206934"   "5208912"   "5404488"   "5577247"   "5600834"   "5630116"   "5684984"   "5794039"   "5799151"   "5805830"   "5862325"   "5905863"   "5913059"   "5923846"   "5990887"   "6101532"   "6105055"   "6122632"   "6161149"   "6182117"   "6233600").PN. OR ("6484196"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:49
L28	21	L27 and @ad<"19980401"	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/20 17:50
S1	2	("6684211").PN.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/20 09:43
S2	64	("5204947"   "5377354"   "5499109"   "5508817"   "5513126"   "5548789"   "5572643"   "5574843"   "5619648"   "5623603"   "5627764"   "5630060"   "5666542"   "5675507"   "5680619"   "5694163"   "5706502"   "5710883"   "5724574"   "5734835"   "5737599"   "5737619"   "5754700"   "5754765"   "5754851"   "5760773"   "5761673"   "5764235"   "5767846"   "5768505"   "5781741"   "5781785"   "5784058"   "5787470"   "5794039"   "5794259"   "5809512"   "5818435"   "5818447"   "5821926"   "5826102"   "5828839"   "5835683"   "5842020"   "5845299"   "5848415"   "5850446"   "5854893"   "5870544"   "5875322"   "5878223"   "5882202"   "5911776"   "5918012"   "5956491"   "5963217"   "5983190"   "5987503"   "5995093"   "6014688"   "6029164"   "6069622"   "6161107"   "6210172").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/17 17:16

## EAST Search History

S3	0	("6684211").URPN.	USPAT	OR	ON	2006/01/17 17:53
S4	2	("20040222972").PN.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/17 17:53
S5.	380	(345/172).CCLS.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/18 11:33
S6	5388	(707/10).CCLS.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/18 11:27
S7	0	("2004/0222972").URPN.	USPAT	OR	ON	2006/01/18 11:29
S8	448	(Internet or web) and messenger or (multimedia adj communicat\$3)and text and image and object	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/01/18 11:38
S9	164	propert\$4 and S8	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/01/18 11:38
S10	169	sender and S8	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/01/18 12:19
S11	0	("2005/0259652").URPN.	USPAT	OR	ON	2006/01/18 11:43
S12	0	"IM" and (instant adj messag\$6) and chat&4 and S8	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/01/18 12:22
S13	0	IM and (instant adj messag\$6) and chat&4 and S8	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/01/18 12:27
S14	0	IM and (instant adj messag\$6) and chat&4	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/01/18 12:22
S15	0	(instant adj messag\$6) and chat&4	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/01/18 12:27
S17	12	IM and (instant adj messag\$6) and chat\$4 and S8	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/01/18 12:27
S18	0	("2004/0230659").URPN.	USPAT	OR	ON	2006/01/19 14:51

## EAST Search History

S19	2538	(instant adj messag\$6) and chat\$4	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/01/19 15:10
S20	2926	(709/227).CCLS.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/19 15:10
S21	1576	(709/204).CCLS.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/19 15:10
S22	1	("6987991").PN.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/20 09:43
S23	5	("20020077135"   "20020156866"   "20030107555"   "6021313"   "6539240").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/20 10:05
S24	2	("2002/0077135").URPN.	USPAT	OR	ON	2006/01/20 11:44
S25	2	("5956491").PN.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/20 11:44
S26	4	("4525779"   "5008853"   "5528671"   "5659692").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/20 11:53
S27	2	("5854893").PN.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/20 11:55
S28	2	("5574843").PN.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/01/20 11:55
S29	36	("4315315"   "4449180"   "4455619"   "4536840"   "4546435"   "4569019"   "4644423"   "4656603"   "4681548"   "4689022"   "4723210"   "4734764"   "4736320"   "4739477"   "4779080"   "4813013"   "4821211"   "4821220"   "4827404"   "4860204"   "4872167"   "4885717"   "4893256"   "4899136"   "4905163"   "4931950"   "4953080"   "5010500"   "5072412"   "5084813"   "5204947"   "5208665"   "5208745"   "5214756"   "5220657"   "5317732").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/20 11:55

## EAST Search History

S30	26	("5574843").URPN.	USPAT	OR	ON	2006/01/20 11:58
S31	11	("4785391"   "5345067"   "5574843"   "5748192"   "5754873"   "5771342"   "5790094"   "5880709"   "5898419"   "5977979"   "6034661").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/20 12:28
S32	36	("4315315"   "4449180"   "4455619"   "4536840"   "4546435"   "4569019"   "4644423"   "4656603"   "4681548"   "4689022"   "4723210"   "4734764"   "4736320"   "4739477"   "4779080"   "4813013"   "4821211"   "4821220"   "4827404"   "4860204"   "4872167"   "4885717"   "4893256"   "4899136"   "4905163"   "4931950"   "4953080"   "5010500"   "5072412"   "5084813"   "5204947"   "5208665"   "5208745"   "5214756"   "5220657"   "5317732").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/20 13:36
S33	56	chat\$4 and IM and (instant ADj messag\$4) and theme	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/20 13:38
S34	9	("20010036839"   "20020023131"   "20020090069"   "20020091777"   "5428784"   "5835130"   "6226362"   "6282565"   "6501834").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/20 13:39
S35	0	("6760754").URPN.	USPAT	OR	ON	2006/01/20 13:41
S36	15	("20020026483"   "20020034281"   "20020059144"   "20020116275"   "20030007625"   "5826064"   "6026156"   "6229880"   "6252588"   "6349327"   "6397184"   "6427064"   "6510452"   "6519771"   "6574604").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/20 13:42

 **PORTAL**  
USPTO

Subscribe (Full Service) Register (Limited Service, Free) Login  
**Search:**  The ACM Digital Library  The Guide  
 messenger emoticons 

## THE ACM DIGITAL LIBRARY

 [Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used **messenger emoticons**

Found 40 of 182,223

Sort results by **relevance** [Save results to a Binder](#)[Try an Advanced Search](#)Display results **expanded form** [Search Tips](#)[Try this search in The ACM Guide](#) [Open results in a new window](#)

Results 1 - 20 of 40

Result page: **1** 2 3 nextRelevance scale **1** [Work-in-progress: Emoticons convey emotions without cognition of faces: an fMRI study](#)

Masahide Yuasa, Keiichi Saito, Naoki Mukawa

April 2006 **CHI '06 extended abstracts on Human factors in computing systems CHI '06****Publisher:** ACM PressFull text available:  [pdf\(823.14 KB\)](#) Additional Information: full citation, abstract, references, index terms

In this paper, we describe the brain activities that are associated with emoticons by using functional MRI (fMRI). In communication over a computer network, we use abstract faces such as computer graphics (CG) avatars and emoticons. These faces convey users' emotions and enrich their communications. In particular, when we see some abstract faces, we feel that they are more vivid and lively than photorealistic faces. However, the manner in which these faces influence the mental process is as yet ...

**Keywords:** brain activity, emoticon, face mark, facial expression, functional MRI, life-like character, nonverbal communication, personified agent

**2** [The effects of emotional icons on remote communication](#)

Krisela Rivera, Nancy J. Cooke, Jeff A. Bauhs

April 1996 **Conference companion on Human factors in computing systems: common ground****Publisher:** ACM PressFull text available:  [pdf\(246.99 KB\)](#) Additional Information: full citation, references, citings, index terms**3** [Towards mood-oriented interfaces for synchronous interaction](#)

J. Alfredo Sánchez, Ingrid Kirschning, Juan Carlos Palacio, Yulia Ostróvskaya

October 2005 **Proceedings of the 2005 Latin American conference on Human-computer interaction CLIHC '05****Publisher:** ACM PressFull text available:  [pdf\(492.65 KB\)](#) Additional Information: full citation, abstract, references

This paper presents an approach to representing emotions in synchronous text-based communication which facilitates setting, conveying and perceiving an intended mood in a continuing fashion. We posit that, while chatting, users typically remain in a continual mood for relatively extended periods of time, as compared to the instantaneous